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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,676	04/14/2004	Jurgen Kuss	9243.0218-01	4882

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EXAMINER	
NGUYEN, CHAU N	
ART UNIT	**PAPER NUMBER**
2831	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/823,676	KUSS ET AL.	
	Examiner	Art Unit	
	Chau N. Nguyen	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *27-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 43, 44, 49 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone et al. (3,576,940).

Stone et al. discloses an electrical cable and an inherent method for making an electrical cable, comprising forming on a conductor (10) a first insulation layer and a second insulation layer, and forming a sheath (15) comprising a halogen-free fire resistant mixture (re claim 43). Stone et al. also discloses the first insulation layer comprising silicone rubber compound (re claim 44), forming the first insulation layer on the conductor and forming the second insulation layer on the first layer (re claim 49), forming the second insulation layer on the conductor and forming the first insulation layer on the second insulation layer (re claim 50).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al.

Stone et al. discloses the invention substantially as claimed except for the first and second layers being extruded on the conductor simultaneously. Although not specifically disclosed by Stone et al., it would have been obvious to one skilled

in the art to form the first and second layers of Stone et al. by simultaneously extruding the layers on the conductor since this method of forming insulating layers on a conductor is well-known in the art.

6. Claims 27, 29, 32, 35, 40-42, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al. in view of Figure 3 (Applicant Admitted Prior Art).

Stone et al. discloses an electrical cable having at least one core (10) including a conductor and an insulation surrounding the conductor which is copper (re claim 42), the insulation comprising at least two insulation layers, a first insulation layer comprising a silicone rubber compound and a second insulation layer. Stone et al. does not disclose the second insulation layer comprising a copolymer or terpolymer or hardgrade EPR. Figure 3 discloses an electrical cable having an insulation layer comprising consisting of hardgrade-EPR (see specification, page 3, lines 23-30). It would have been obvious to one skilled in the art to use hardgrade-EPR for the second insulation layer of Stone et al. since hardgrade-EPR has good insulation properties and strength as disclosed by Figure 3 (re claims 27, 29, 46 and 47).

The modified cable of Stone et al. also discloses the second insulation layer being arranged on the conductor and the first insulation layer being arranged on the second insulation layer (re claim 32). The modified cable of Stone et al. would allow the cable to conform with a burn test according to the German DIN standard and can be used as a communication cable or a power cable since it comprises structure and material as claimed in claim 27 (re claim 35, 40, 41).

7. Claims 28 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al. in view of Figure 3 as applied to claim 27 above, and further in view of DE 44 37 596 (DE'596).

Claims 29 and 36 additionally recite the silicone rubber compound of the first insulation layer comprising a hard ash. DE'596 discloses the use of a hard ash forming silicone rubber which is a fire resistant mixture. It would have been obvious to one skilled in the art to use the hard ash taught by DE'596 in the first insulation layer of Stone et al. to provide fire resistance properties for the cable.

8. Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al. in view of Figure 3 as applied to claim 27 above, and further in view of Figure 5 (Applicant Admitted Prior Art).

Claims 37-39 additionally recite a plurality of said insulated conductors being stranded together and surrounded by an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath. Figure 5 discloses a cable comprising a plurality of insulated conductors being stranded together and surrounded by an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath. It would have been obvious to one skilled in the art to surround a plurality of the modified insulated conductors of Stone et al. with an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath as taught by Figure 5 to provide a multi-core cable for multiple transmission purposes.

9. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al. in view of DE 44 37 596 (DE'596).

Claim 45 additionally recites the silicone rubber compound of the first insulation layer comprising a hard ash. DE'596 discloses the use of a hard ash forming silicone rubber which is a fire resistant mixture. It would have been obvious to one skilled in the art to use the hard ash taught by DE'596 in the first insulation layer of Stone et al. to provide fire resistance properties for the cable.

10. Claims 53 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Figure 5 (Applicant Admitted Prior Art).

Claims 53 and 54 additionally recite a plurality of said insulated conductors being stranded together and surrounded by an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath. Figure 5 discloses a cable comprising a plurality of insulated conductors being stranded together and surrounded by an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath. It would have been obvious to one skilled in the art to surround a plurality of the modified insulated conductors of Stone et al. with an inner sheath, an outer sheath and a conductor comprising a plurality of copper filaments between the inner sheath and the outer sheath as taught by Figure 5 to provide a multi-core cable for multiple transmission purposes.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214

USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 30, 31, 33, 34 and 48 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 13-16 of U.S. Patent No. 6,781,062 (Kuss et al.) in view of Stone et al.

Claims 1 and 13-16 of Kuss et al. discloses the invention substantially as claimed except for an outer sheath comprising a halogen-free fire resistant mixture. Stone et al. discloses a cable comprising an outer sheath (15) comprising a halogen-free fire resistant mixture. It would have been obvious to one skilled in the art to use the outer sheath as taught by Stone et al. in the cable of Kuss et al. to provide the cable with flame resistant property.

Response to Arguments

13. Applicant's arguments filed May 13, 2005 have been fully considered but they are not persuasive.

Regarding the 35 USC 102 rejection, applicant argues that there is no teaching or disclosure in Stone indicating that the element 15 is halogen-free or any mention of the idea of a halogen-free sheath. This argument is not found persuasive. Stone in col. 3, beginning on line 15, discloses that the element 15 is a layer of asbestos impregnated with an intumescent material which is polyamide resins. As known in the art, asbestos and polyamide resins both are not halogenated materials. Applicant points to col. 5, lines 31-60 of Stone where it discloses the outer layer containing "chlorinated parafins and halogenated phenols". However, this embodiment (Figure 3), is an alternate embodiment from Figure 2 which comprises the halogen-free sheath element 15.

Regarding the 35 USC 103 rejection, applicant's argument is based primarily on the fact that Stone does not teach a halogen-free outer sheath. As stated above, Stone, in Figure 2, does teach a halogen-free outer sheath 15. Accordingly, the 35 USC 103 rejection still stands.

Summary

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N. Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chau N Nguyen
Primary Examiner
Art Unit 2831